Repro by

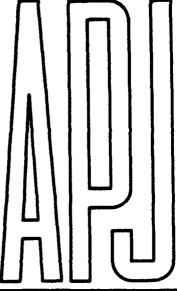




S DTIC S ELECTE NOV 0 6 1992 A STRUCTURED ANALYSIS

ILS ASSESSMENT E12
STANDARDIZATION & INTEROPERABILITY

APJ 966-205





AMERICAN POWER JET CO. RIDGEFIELD N.J

This document has been approved for public release and sale; its distribution is unlimited.

92 11 03 03

92-28782

REPORT DOCUMENTATION PAGE Form Approved OMB No. 0704-0188					
1a. REPORT SECURITY CLASSIFICATION	DOCOMENTATIO	1b. RESTRICTIVE	MARKINGS	OA	AB No. 0704-0188
UNCLASSIFIED		TO. RESTRICTIVE	WANNINGS		
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION	AVAILABILITY OF	REPORT	
26. DECLASSIFICATION / DOWNGRADING SCHE	DULE	UNLIMITE	D		
4. PERFORMING ORGANIZATION REPORT NUM	BER(S)	5. MONITORING	ORGANIZATION RE	PORT NUMBER	(S)
		}			•
6a. NAME OF PERFORMING ORGANIZATION	6b. OFFICE SYMBOL	7a. NAME OF M	ONITORING ORGAN	NIZATION	·
AMCCOM, Army	(If applicable) AMSMC-MAE-E	2			
6c. ADDRESS (City, State, and ZIP Code)	12.0.0 .2.0 .2.	<u> </u>	ty, State, and ZIP C	ode)	
Rock Island Arsenal		j	•	•	
Rock Island, IL 61299-60	00				
8a. NAME OF FUNDING/SPONSORING	8b. OFFICE SYMBOL	9. PROCUREMEN	T INSTRUMENT IDE	NTIFICATION N	UMBER
ORGANIZATION	(If applicable)				
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF	UNDING NUMBERS		
		PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.
		LEELWEIT NO.	, NO.	110.	ACCESSION NO.
11. TITLE (Include Security Classification) St	ructured Analy	sis of the	E Logistic	Support	Analysis
(LSA) Task, and Intergrat and Interoperability (S&I	ed Logistic Su	ipport (ILS	S) Element	, "Standa	ardization
12. PERSONAL AUTHOR(S)), (APJ 966-20	15).		 	
DUCLOS, RONALD	SHEPHERD, NE	ED			<u>kmk</u>
13a. TYPE OF REPORT 13b. TIME FROM	1	14. DATE OF REPO NOV 1988	RT (Year, Month, D	(6.1	COUNT
16. SUF PLEMENTARY NOTATION				1 🗸	
•					
17. COSATI CODES	18. SUBJECT TERMS (C				
FIELD GROUP SUB-GROUP	STRUCTURED A	NALYSIS, I	LOGISTIC SI	JPPORT A	NALYSIS,
	LSA, PROCESS ENTITIES, OV	EES, DATA E ERALL SYS1	FLOWS, DATA	A STORES	EX F ERNAL
19. ABSTRACT (Continue on reverse if necessar	and identify by block nu	ımber)	220 0	T TROCED.	J. OVEL
This report is one of a c	omina museuki			•	_
This report is one of a s Logistic Support Analysis	(LSA) Task an	d the Inte	ergrated Lo	ogistic 9	Support
(ILS) Element. Included	in this report	is the St	ructured A	Analvsis	for the
LSA Task and ILS Element, "Standardization and Interoperability (S&T)" with					
the corresponding description of the processes, data flows, data stores, and external entities involved on each data flow diagram; and an overview of					
assessemnt procedures and a guide to the overall assessment. A brief over-					
view of the Structured Analysis and its place in the overall systems design process is also included.					
process is also included.					
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT		21. ABSTRACT SEC		TION	
XIL UNCLASSIFIED/UNLIMITED	UNCLASSIFI 22b. Telephone (#		22c OFFICE S	/MBOL	
NED SHEPHERD	(309) 782-		AMSMC-MA		

STRUCTURED ANALYSIS

ILS ASSESSMENT STANDARDIZATION & INTEROPERABILITY

under

CONTRACT DAAA21-86-D-0025

DTIC QUALITY INSPECTED 4

	NTIS	CRA&I	M		
į	DTIC	TAB	ñ		
	Unann	ounced	ñ		
	Justific	cation			
	Ву				
	Distribution /				
	Availability Codes				
	Dist	Avail and			
		Specia	i)		
	Λ.Ι				
	4-1				
1					

Accesion For

for

HQ US AMCCOM INTEGRATED LOGISTIC SUPPORT OFFICE AMSMC-LSP ROCK ISLAND, IL

by

AMERICAN POWER JET COMPANY

RIDGEFIELD, NJ FT. EUSTIS, VA FALLS CHURCH, VA ST. LOUIS, MO

November 1988

FOREWORD

APJ, under contract to HQs, AMCCOM, has initiated the automation of the LSA Tasks (MIL-STD-1388-1) and the assessment of the ILS elements (AR 700-127). The major goal of this program is to unify the approach to performance of ILS and LSA by military and contract logisticians.

Detailed to meet all requirements of the LSA and ILS, the automated process will continue to provide the flexibility of selecting tasks/elements to be addressed at each life cycle stage. A major advantage is that the application of a task element is consistent with prescribed Army policies and procedures.

This report is one of a series presenting the Structured Analysis of each LSA Task and ILS Element. Structured Analysis comprises a description of the process being automated in terms which facilitate system design and subsequent programming. It is increasingly the preferred approach in both industry and Government.

This Technical Note reports on the Data Flow Diagrams (DFD) of the assessment of the ILS Element, "Standardization and Interoperability (S&I)"*, and provides definitions of the processes, data flows, data stores, and external entities involved on each DFD. The report provides an overview of the assessment procedures and a guide to the overall assessment.

To view this work in context, this report also presents a brief overview of Structured Analysis and its place in the overall systems design process to assist the reader who may not be fully briefed on the symbols and conventions used. This overview of Structured Analysis is repeated verbatim in every report in this series to allow each report to stand alone.

The numerical identification assigned corresponds to the task/subtask/element identified in MIL-STD-1388-1 or AR 700-127 in effect as of the APJ contract start date (October 1986). Both publications are currently being updated, which may alter the numbering of the respective elements. The latest updated guides will, however, be used in the Structured Analysis Program. Comments are welcomed.

^{*} As identified in AR 700-27, "Integrated Logistic Support", Appendix E, effective 15 June 1983 (E-12 retains the same identity in the 16 January 1987 edition of AR 700-127).

TABLE OF CONTENTS

TITLE		<u>PAGE</u>
Backgroun	nd	1
Purpose.	• • • • • • • • • • • • • • • • • • • •	1
		2
	dardization/Interoperability (S&I)	
	ent Description	2
Overview	of Standardization & Inter-	
operabi:	lity (El2) Data Flow Diagrams	3
		4
Structure	ed Analysis and Design	6
	ization and Interoperability (S&I)	
	ow Diagrams	7
APPENDIX	A: Standardization and	
	Interoperability (S&I) Data Flow	
	Diagrams and Process Data	
	Dictionaries	A-l
GLOSSARY	- DATA FLOW DIAGRAMS	DG-1
	- TEXT	TG-1
	LIST OF ILLUSTRATIONS	
FIGURE NO). TITLE	PAGE
•		_
1 ·		
	Systems Design Organization	8
•		
2	Standard DFD Symbol Definitions	10
m> 070		
TASKS:		
53. 2	Oham San Simotina / Tuta a company 1 1 3 1 1 a	
E12	Standardization/Interoperability	
E10 13	Overview	:
E12.1A	Interfaces with other Army, Service	:e
D10 01	and Ally Equipment	
E12.2A	Parts, Processes & Supply	
510 0 5	Standardization	
E12.3A	Standardization & Interoperability	7
	Implementation Plans & Resources	
53.0 4.5	Availability	
E12.4A	Standardization & Interoperability	,
	Plans and Resources Execution	

STRUCTURED ANALYSIS - ILS ASSESSMENT STANDARDIZATION AND INTEROPERABILITY (S&I)

BACKGROUND

The Department of the Army has a requirement for management control over contractor and Government Agency response to the requirements of AR 700-127, "Integrated Logistic Support", and MIL-STD-1388-1, "Logistic Support Analysis". HQs AMCCOM has initiated action to structure the tasks, the form of the results, and the detailed processes to insure consistency with current Army policies, procedures, and techniques.

This approach (undertaken by AMCCOM and APJ) will insure uniformity in efforts and products, reproducibility of analyses, and a well-defined structure which can be coordinated among all participants in the logistic process to arrive at common understanding and procedures.

PURPOSE

The purpose of this report series is to present the results of the APJ efforts under Contract DAAA21-86-D-0025 for coordination with the AMCCOM Program Manager prior to in-depth structured design of ILS/LSA functions/processes. This report addresses ILS assessment of Standardization and Interoperability (S&I).

SCOPE

ILS assessment of S&I concerns the review and assessment of the plans, programs, and actions taken to insure optimization of the standardization potential, and to maximize the interoperability of the development item/equipment.

This report summarizes the major efforts and results of the structured analysis of this ILS assessment area and presents the associated Data Flow Diagrams (DFDs) developed from the Structured Analysis. The sections of the Data Dictionary relating to the label, name, process, data flow, data store, and external entity descriptions are included in their present degree of completeness. (The Data Dictionary is a "living document" that evolves through the analysis/design process).

To place this work in context, this report also presents a brief overview of structured analysis and its place in the overall systems design process to assist the reader who may not be fully briefed on the symbols and conventions used.

ILS S&I ASSESSMENT DESCRIPTION

Four (4) major elements are associated with S&I, in accordance with the requirements of AR 700-127, "Integrated Logistic Support":

- 1. System Family Approach
- 2. Interoperable Systems
- 3. Proven (off-the-shelf) Components and Subsystems
- 4. Other Service, NATO Ally Interface

Development of S&I assessment processes requires consideration of the specific areas of concern within the context of the life cycle phase in the acquisition process. There is a parallel requirement that the review/assessment team have an awareness of current Army policies and procedures related to these areas, as well as possible agreements or potential arrangements which have been or could be made with other Services or potential host countries which may assist the Army in the support of developmental item/equipment.

The outputs of this ILS assessment will be identification of those areas of the Army support systems, acquisition processes/plans, and inter-Service opportunities, which provide potential economic savings attainable through standardization of parts, processes and policies and interoperability with other major systems and equipment. Particular reference should be made to the areas requiring further consideration, changes in plans, and the preparation corresponding set of recommendations for corrective actions to complete/correct/update S&I documentation.

OVERVIEW OF STANDARDIZATION AND INTEROPERABILITY (E12) DATA FLOW DIAGRAMS (DFDs):

S&I is assessed from two points of view: The first looks primarily at issues or concerns of Rationalization, Standardization, Interoperability (RSI) which are S&I issues mutually affecting our allies and the U.S. Army. The second looks into S&I issues of concern within the Army and other DOD activities with no particular reference to our allies.

At the top level DFD:

- El2.1 reviews requirements documents to identify stated, implied and potential RSI interfaces.
- El2.2 examines internal S&I interfaces within DOD activities, not only at equipment interfaces but at S&I activities which occur at the subassembly and component level.
- El2.3 considers both the RSI and internal S&I planning and resource issues.
- El2.4 considers both the RSI and internal S&I execution of the planned efforts.
- El2.5 sorts the subassessments or comments made during the prior processes to assist the reviewer in the overall assessment of the S&I element and to identify those actions which were satisfactory, marginal, conditional, or unsatisfactory and present recommendations.

APPROACH

The APJ approach to the Structured Design of the ILS assessments is:

- l. Scope the processes required to meet the intent of MIL-STD 1388-1 and AR 700-127, as well as the guidance provided by DA PAM 700-28, "Integrated Logistic Support Program Assessment Issues and Criteria", DA PAM 700-55, "Instructions for Preparing the Integrated Logistic Support Plan", and AMC R 700-5, "Logistics Integrated Logistic Support" (with its AMCCOM Supplement).
- 2. Review the applicable Data Item Descriptions (DIDs) from the Acquisition Management systems and Data Requirements Control List (AMSDL) published by the Department of Defense.

- 3. Review all source documents referenced in the AMSDL as applicable to the referenced DIDs of interest.
- 4. Apply staff experience in logistics support analysis to assure that the intent of the task has been addressed.
- 5. Validate results in discussions with Army activities/personnel directly involved in the applicable or related LSA tasks.

The Structured Analysis and preparation of Data Flow Diagrams (DFDs) was further assisted by the application of Structured Analysis software. Licensed by Index Technology Corporation, Excelerator provides for automated tracking of names, labels, descriptions, multiple levels of detail in the data flow diagrams, and industry standards in symbols and diagraming practices.

Following completion of the draft DFDs, the diagrams are made available to working Army logisticians currently (or recently) directly involved in the application of the same LSA tasks in current Army development programs. Comments are solicited relative to the logic of the processes described, the scope and details of the indicated approaches, and the outputs implied by the LSA task requirements.

The draft products to date were well received by the external reviewers, and requests have been received for copies of the DFDs for in-house use in organizing ILS/LSA efforts. Comment was also made that the DFDs will be a useful training tool for apprentice logisticians, since they provide an overall picture of the total task and a uniform approach to its fulfillment.

STRUCTURED ANALYSIS AND DESIGN

Structured Analysis and Structured Systems Design evolved from the need to define and demonstrate the underlying logical functions and requirements of large systems. The concept of Structured Analysis involves building a logical (non-physical) model of a system, using graphic techniques which enable users, analysts, and designers to get a clear and common picture of the system and how its parts fit together to meet the user's needs. It is followed by structured design, and then by programming and test/validation.

The Structured Analysis/Structured Systems Design process, sometimes referred to as "Structured Design", is well documented and widely utilized in Government and industry. As stated in "The Practical Guide to Structured Systems Design" (Meilir Page-Jones, Prentice-Hall, Englewood Cliffs, NJ, 1980),

- ... "Structured Design is disciplined approach to computer system design, an activity that in the past has been notoriously haphazard and fraught with problems. Structured Design is a response to the failings of the past. It has five aspects:
- "1. Structured Design allows the form of the problem to guide the form of the solution.
- "2. Structured Design seeks to conquer the complexity of large systems by means of partitioning the system into "black boxes," and by organizing the black boxes into hierarchies suitable for computer implementation.
- "3. Structured Design uses tools, especially graphic ones, to render systems readily understandable.

- "4. Structured Design offers a set of strategies for developing a design solution from a well defined statement of a problem.
- "5. Structured Design offers a set of criteria for evaluating the quality of a given design solution with respect to the problem to be solved.

"Structured Design produces systems that are easy to understand, reliable, flexible, long lasting, smoothly developed, and efficient to operate - and that WORK...."

The organization of Structured Analysis and its relationship to Structured System Design is shown on Figure 1.

STANDARDIZATION AND INTEROPERABILITY (S&I) DATA FLOW DIAGRAMS

The Data Flow Diagram is a tool that shows flow of <u>data</u>, i.e., data flows from sources and is processed by activities to produce intermediate or final products.

The DFD provides a useful and meaningful partitioning of a system from the viewpoint of identification and separation of all functions, actions, or processes so that each can be introduced, changed, added, or deleted with minimal disruption of the overall program, i.e., it emphasizes the underlying concept of modularity and identifiable transformations of data into actionable products.

A series of five (5) DFDs have been developed to structure this task:

- 1. El2 Standardization/Interoperability Overview
- 2. El2.1A Interfaces with other Army, Service and Ally Equipment
- 3. El2.2A Parts, Processes & Supply Standardization

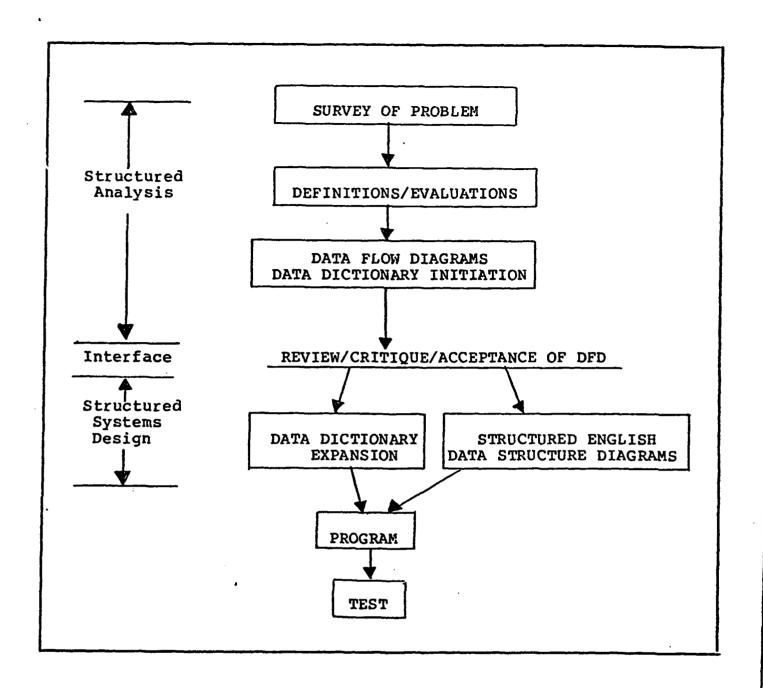


Figure 1. Structured Analysis and Structured Systems Design Organization

- 4. El2.3A Standardization & Interoperability Implementation Plans & Resources Availability
- 5. El2.4A Standardization & Interoperability Plans and Resources Execution

Each DFD is keyed to the specific element (ILS, in this case) process through the identification number assigned in the lower right hand box. The alpha codes indicate the level of indenture or explosion below the top level, i.e,:

Top Level......ILS DFD E12
First Indenture.....ILS DFD E12.1A

Each DFD makes reference to the basic ILS assessment area addressed, as well as the level of indenture (explosion) of the DFD. For example, the first or top level DFD is "E12", referring to the ILS assessment element E-12, "Standardization and Interoperability", listed in Appendix E, AR 700,127, effective 15 June 1983 (the edition in effect at the start of the study). Processes (bubbles) at the top level DFD (e.g., E12.4 - Standardization and Interoperability Plans and Resources Execution Assessment) may be expanded (exploded). For example, a second level of E12.4 is identified as E12.4A (an alpha B would designate a third level.)

Four standard symbols are used in the drawings of a DFD (see Figure 2).

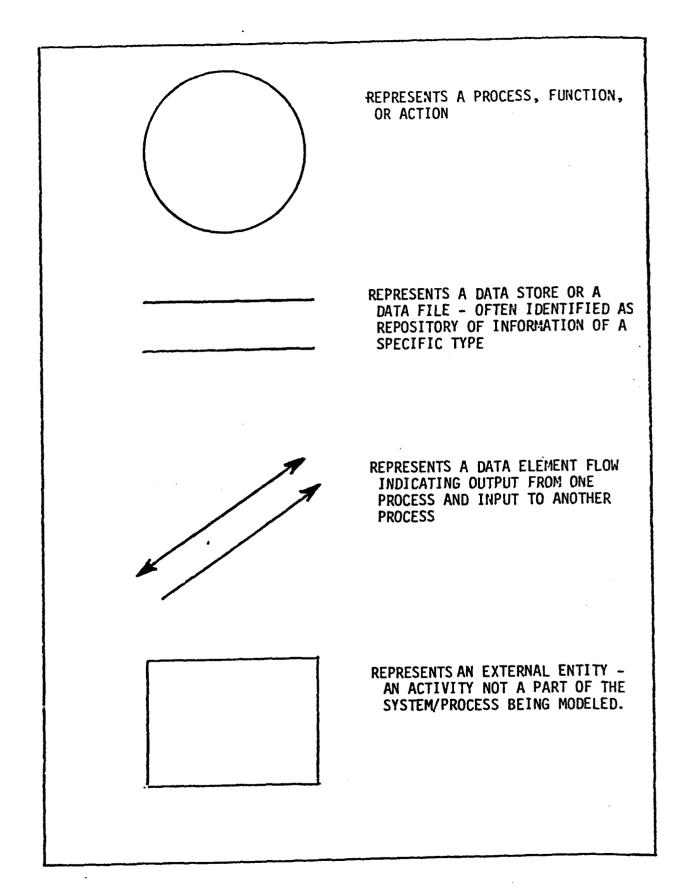


Figure 2. STANDARD DFD SYMBOL DEFINITIONS

A copy of each of the DFDs is presented in Annex A, accompanied by the Data Dictionary process elements. Each entry in the DFDs has a corresponding entry in the Data Dictionary. This Technical Note presents those Data Dictionary entries necessary for the coordination of the overall concept and details of the DFDs. Thus, definitions for the processes, data flows, data stores, and external entities immediately follow each DFD.

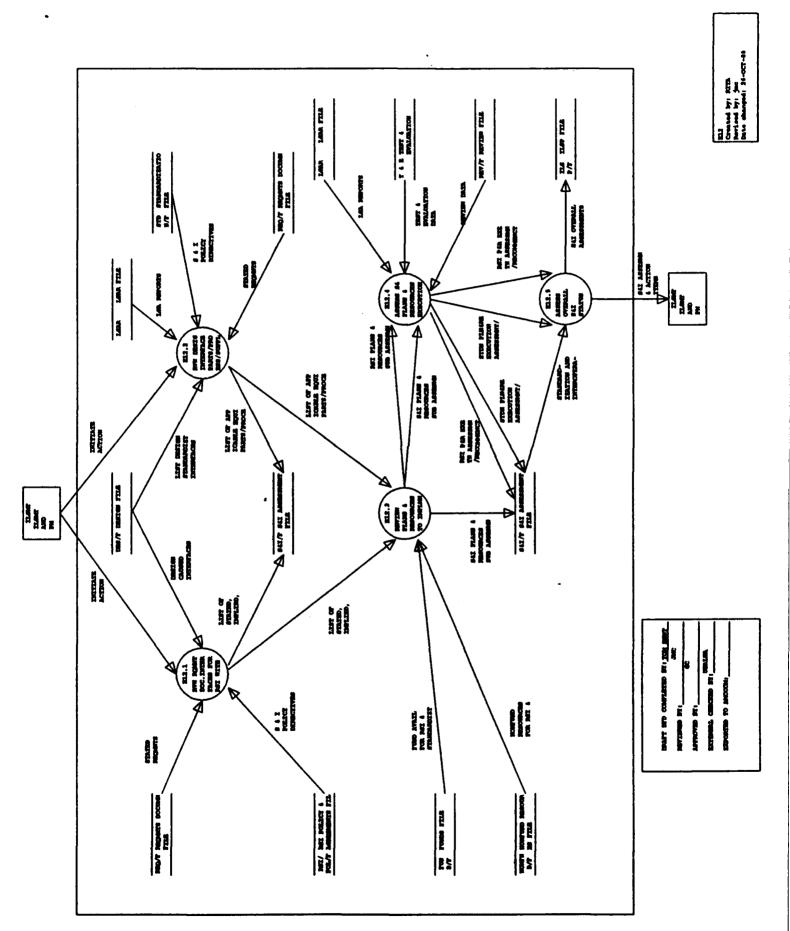
As the DFDs progress through Structured System Design, the Data Dictionary will continue to be expanded and completed. Since these are working documents and not final submissions, no effort has been devoted to editorial niceties, e.g., spelling, typography, etc.

It is noted that the output structure of Excelerator automatically truncates the number of letters and lines displayed as a function of image size. Thus, in the format size of this report, the full identifying entry is forcibly shortened, introducing the possibility of a misunderstanding. Therefore, in all cases, the identifications are fully presented for the process elements in the text accompanying the diagrams.

APPENDIX A

STANDARDIZATION AND INTEROPERABILITY (S&I)
DATA FLOW DIAGRAMS AND
PROCESS DATA DICTIONARIES

E12 STANDARDIZATION/INTEROPERABILITY OVERVIEW



DATE: 26-007-88

TIME: 15:19

APJ PROJECT 966

DFD E12 PROCESS DEFINITIONS

EXCELERATOR 1.8

PAGE

Name

Label

Description

E12.1

RVW ROMNIS REVIEW REQUIREMENTS DOCUMENTS FOR INTERFACES WITH OTHER ARMY, SERVICE DOC.INTER- AND ALLY EQUIPMENT

FACES FOR

RSI WITH ACRONYMS: ROC - Required Operational Capability

ALLY EQUIP

JSOR - Joint Services Operational Requirements

060 - Operational and Organizational

MSP - Mission Support Plan

RSI - Rationalization, Standardization, and Interoperability
PURPOSE OF DATA PROCESS: In this process a review of the requirements
documents is done to identify explicit and implicit Rationalization,
Standardization, Interoperability (RSI) interfaces; standing agreements
are also reviewed for applicability. Design caused RSI interfaces are
also reviewed (i.e., an interface not called for in any document
explicitly, but something in the design may mandate an RSI interface per
prior agreements). RSI is defined in detail in Paragraph 1.5, AR 34-1.
SOURCE OF DATA: Requirements documents such as ROC's, JSOR's, OGO's,
Specifications, Mission Support Plans (MSP's), Multinational Development
Agreements, Standing Standardization Agreements

E12.2

RVW DESIGN REVIEW DESIGN INTERFACES PARTS, PROCESSES, SUPPLY STANDARDIZATION AND INTERFACES OTHER SERVICES INTERFACES

PARTS/PROC

PARIS/PROC

ESS/SUPPLY PURPOSE OF DATA PROCESS: This process identifies explicit

STANDRDITH references to S&I requirements with other Army and, other services items
of hardware which may or may not also be compatible with allied
equipment or hardware. This process also identifies interface
standardization that occurrs normally at or below the subsystem level
and which may or may not have RSI implications. It checks for
standardization or commonality of internal hardware and processes as
addressed in AR's on parts standardization, MIL-SID's etc. The goal is
to check for the application of any nonstandard parts or processes
which may have logistical implications at a latter time.

SOURCE OF DATA: The requirements documents ROC's, JEOR's, O&O'S; AR
700-47, AR 700-50, AR 700-60, MIL-SID's dealing with uniformity of
standards or procedures to be used on acquisition projects.

E12.3

REVIEW PLANS & REVIEW PLANS AND RESOURCES TO IMPLEMENT STANDARDIZATION &

INTEROPERABILITY

RESOURCES

TO IMPLANT PURPOSE OF DATA: This process identifies the support organizations

86I and the associated personnel, and financial resources available for the

86I tasks/efforts.

SOURCE OF DATA: The identified S&I tasks, funding data, personnel, equipment, facilities resources either RSI or internal to DOD activities.

DATE: 26-OCT-88 TIME: 15:19 APJ PROJECT 966

DFD E12 PROCESS DEFINITIONS

PAGE 2

EXCELERATOR 1.8

Name		Description
B12.4		ASSESS S&I PLANS & RESOURCES EXECUTION
	RESOURCES	PURPOSE OF DATA PROCESS : This process assesses whether the identified
	EXECUTION	plans and resources identified in E12.3 were executed and utilized as
		planned. An assessment as to whether the S&I effort should be modified
		can also be made here.
		SOURCE OF DATA: Program/design review information, test and LSAR
		info, contractual deliverables as appropriate.
E12.5	ASSESS OVERALL	ASSESS OVERALL S41 STATUS
	861	
	STATUS	PURPOSE OF DATA PROCESS: This process consolidates all S&I
		subassessments and generates an overall assessment for S&I issues.
		SOURCE OF DATA : S&I assessment file where all subassessments are
		stornd.

DATE: 26-00T-88

TIME: 15:24

APJ PROJECT 966

DFD E12 DATA FLOW DEFINITIONS EXCELERATOR 1.8

PAGE

1

Name

Label

Description

DES/INT

DESIGN

DESIGN CAUSED INTERFACES

CAUSED

INTERFACES FIELD INFORMATION, TYPE, STYLE : Narrative comments.

PURPOSE OF DATA: This information is aggregated from the design file to show what interfaces with S&I implications need to be considered which where neither stated nor initially implied, but because of design accomodations must now be considered for its S&I impacts.

SOURCE OF DATA: Design reviews or design working group notes.

FUND/RSI/STON

FUND AVAIL FUNDS AVAILABLE FOR RSI AND STANDARDIZATION EFFORTS

FOR RSI 4

STANDARDIZTN ACRONYMS: RSI - Rationalization, Standardization & Interoperability

S&I - Standardization & Interoperability

O4S - Operations and Support

PM - Program Manager

FIELD INFORMATION, TYPE, STYLE : Marrative and numerical comments PURPOSE OF DATA : This data will be used by the reviewer to help assess the adequacy of funding resources made available in the contract for the implementation of RSI and standardization efforts. It can also be used to identify if the various participants are carrying their "fair" share of the burden caused by the S&I effort, especially if it adds significant costs to the development or OSS costs. SOURCE OF DATA: Funding profiles available from the PM or his budget representatives.

INIT/ACT

INITIATE

ACTION

LSA/REP

LSA REPORTS LOGISTICS SUPPORT ANALYSIS (LSA) REPORTS OR RELATED DOCUMENTS FIELD INFORMATION, TYPE, STYLE : Marrative and numerical comments/extracts from LSAR numbered reports or LSA task performance reports

> PURPOSE OF DATA: This data is used as input information on which to perform various processes.

SOURCE OF DATA : LEAR, LSA task reports not documented in LSAR. Specific report numbers under the LSAR must be selected by subject as required for the specific process. MIL-STD 1388-2A lists the various automated reports and the master data record sheets A-J available. Not all LSA task outputs are recorded on the LSAR; the LSA plan (TASK 201) for the particular system needs to be reviewed to see what tasks where to be done. Once LSA tasks are identified you may need to go to MIL-STD 1388-1A or contract for a review of what is required under the various tasks; this may provide an idea if results will also /not be found in hte LSAR.

DATE: 26-OCT-88

TIME: 15:24

APJ PROJECT 966

DFD E12 DATA FLOW DEFINITIONS

PAGE EXCELERATOR 1.8

Label

Description

LST/DES/INT

LIST DESIGN LIST DESIGN STANDARDIZATION INTERFACES

STANDARDIZTN

INTERFACES FIELD INFORMATION, TYPE, STYLE : Narrative comments.

PURPOSE OF DATA: This data contains a listing of components, processes where design standardisation efforts are taking/will/could take place based on engineering studies.

SOURCE OF DATA : Information comes from design data derived from drawings, analyses, etc.

LST/PRI/PRO/WITH/ASS LIST OF APPL LIST OF APPLICABLE EQUIPMENT, PARTS, PROCESSES/PROCEDURES

ICABLE EQUIP STANDARDIZATION WITH ASSESSMENTS

PARTS/PROCES (FOR NON-RSI DIRECTLY RELATED ITEMS)

STANDRDIZTM

WITH ASSMTS FIELD INFORMATION, TYPE, STYLE : Narrative comments and lists with

assessment comments.

PURPOSE OF DATA : This output data reflects the evaluation of the reviewer as to what parts and processes are undergoing standardization efforts, as well as an assessment as to what greater extent it should be considered. RSI items may also form part of this list if the parts/processess are also common to allies; however, the intent is to check for standardization and interoperability within DOD systems. SOURCE OF DATA: The E12.2A3 process wherein lists are consolidated and assessed.

LST/STA/INP/POT/INT LIST OF

LIST OF STATED, INPLIED, POTENTIAL INTERFACES

STATED,

IMPLIED,

FIELD INFORMATION, TYPE, STYLE : Marrative comments.

POTENTIAL.

INTERPACES

PURPOSE OF DATA: Data is aggregated to show listing of all actual and potential interfaces having either RSI for E12.1 series processes or internal Army and DOD S&I interfaces.

SOURCE OF DATA : All E12.1A series subprocesses or E12.2 series subprocesses

NONFND/RSI/STDN/RES NONFUND

NONFUND RSI AND STANDARDIZATION RESOURCES

RESOURCES

FOR RET &

FIELD IMPORMATION, TYPE, STYLE : Marrative and numerical comments or

STANDARDIZTH document extracts.

PURPOSE OF DATA : This data is used to evaluate any non-monetary resources available to the project such as facilities, personnel equipment that will assist in executing the standardisation effort. SOURCE OF DATA : MOU's, agreement documents with allies or other services identifying resource responsibilities to the project.

REV/DIA

REVIEW DATA REVIEW DATA

FIELD INFORMATION, TYPE, STYLE : Narrative comments or extracts from review documents.

PURPOSE OF DATA : Provides inputs so that RSI plan and resource

SOURCE OF DATA: Review documents found in the Review File .

execution can be evaluated .

DATE: 26-00T-86

TIME: 15:24

APJ PROJECT 966

DFD R12 DATA FLOW DEFINITIONS

PAGE

EXCELERATOR 1.8

Name

Label

Description

RSI/EXEC

RSI PAR EXEC RSI PLANS AND RESOURCES EXECUTION ASSESSMENT AND RECOMMENDATIONS

TN ASSESSMNT

/RECOMMENCIN FIELD INFORMATION, TYPE, STYLE : Narrative comments

PURPOSE OF DATA: This data records the reviewers assessment as to how well plans and resources in support of the RSI effort have been

executed.

SOURCE OF DATA : This is an output from process E12.4A1

RSI/SUB/ASS

RSI PLANS & RSI PLANS AND RESOURCES (ALLOCATION) SUBASSESSMENT

SUB ASSESSMIT FIELD INFORMATION, TYPE, STYLE: Narrative comments.

PURPOSE OF DATA: This output data provides the reviewer's assessment as to how adequate are the financial and non-financial resources to accomplish the RSI effort.

SOURCE OF INFORMATION : Output information from E12.3A1

S & I/POL/ DIRECTIVE S & I

SEI POLICY DIRECTIVES

POLICY

DIRECTIVES FIELD INFORMATION, TYPE, STYLE: Narrative comments

PURPOSE OF DATA: This information contains the Standardization and Interoperability policy and directives information which must be complied with when evaluating S&I.

SOURCE OF DATA: AR 34 series, AR 71-9, 700-47, 700-50, 700-60, 700-72, 700-101, 700-115, 703-1, 750-43, AMC-R 700-83, DODD 3405.1,

DS PAM 310-35, MIL-STD 633, 680, 838, 965, and MIL HAMDBOOK 113 apply to

standardization concerns.

SEI/OVRAL/ASS

ASSESSMENTS

S4I OVERALL STANDARDIZATION AND INTEROPERABILITY OVERALL ASSESSMENTS

FIELD INFORMATION, TYPE, STYLE : Narrative comments

PURPOSE OF DATA: This is the final output data from all the S&I subprocesses in E12.*. This data is a rollup of all subassessments in this subject area.

SOURCE OF DATA: SEI assessment file as data as modified in process E12.5

SGI/OVRAL/ASS/WITH/A SGI ASSESSMIT STANDARDIZATION G INTERROPERABILITY OVERALL ASSESSMENTS WITH ACTION

& ACTION ITEMS

ITEMS

FIELD INFORMATION, TYPE, STYLE : Warrative comments.

PURPOSE OF DATA : This is the final output data from the E12.* process it is the same as S4I/OVRAL/ASS but it also includes action items for the directing authority for him/they to take action upon.

SOURCE OF DATA: S&I file as modified in process E12.5.

DATE: 26-0CT-88

TIME: 15:25

AP.T PROJECT 966 DFD E12 DATA FLOW DEFINITIONS

PAGE EXCRIBRATOR 1.8

Name

Label

Description

S&I/POL/DIRECTIVES/S S & I

STANDARDIZATION AND INTEROPERABILITY POLICY DIRECTIVES AND

POLICY

STANDARDIZATION PLAN DATA

DIRECTIVES

& SIDN PLAN FIELD INFORMATION, TYPE, STYLE : Narrative comments.

DATA .

PURPOSE OF DATA: Provides information concerning S&I policies and data from the System Standardization Plan if one exists already. SOURCE OF INFORMATION: The System Standardization Plan, policies from

AR's 700-47, and 700-67

S&I/SUB/ASS

SEI PLANS 6 STANDARDIZATION AND INTEROPERABILITY PLANS AND RESOURCES SUBASSESSMENT

RESOURCES (FOR NON-RSI EXCLUSIVE ITEMS) FOR THE PROJECT

SUR ASSESMNT

FIELD INFORMATION, TYPE, STYLE : Narrative comments PURPOSE OF DATA: This data contains the output information which identifies the adequacy of financial and non-financial resources to accomplish this aspect of the standardization effort.

SOURCE OF DATA: This is output data from E12.3A2.

STAT/REQ

STATED

STATED REQUIREMENTS

REOMNTS

FIELD INFORMATION, TYPE STILE : Narrative comments or extracts from

requirements documents.

PURPOSE OF DATA: This data identifies the explicitly stated Standardisation 6 Interoperability requirements the system must meet for

either RSI or internal DOD use (at the end item or below levels).

SOURCE OF DATA : Requirements documents .

STON/EXEC

STDN PLNGRES STANDARDIZATION PLANS & RESOURCES EXECUTION ASSESSMENT/RECOMMENDATIONS

EXECUTION

ASSESSMET /

RECOMMENDATH FIELD INFORMATION, TYPE, STYLE : Narrative comments

PURPOSE OF DATA: Provides the reviewers assessments and

recommendations as to how well the plans and resources allocated to the

SEI effort have been executed.

SOURCE OF DATA : This is output data from the E12.4A2 process

STDN/INTEROP/ASSMITS STANDARD-

STANDARDIZATION AND INTEROPERABILITY ASSESSMENTS

IZATION AND

INTEROPERA- FIELD INFORMATION, TYPE, STYLE : Marrative comments

BILITY

ASSESSMENTS PURPOSE OF DATA: These data contain all the subassessments from the S4I

assessment process.

SOURCE OF INFORMATION : The S&I file where all comments and assessments

are stored.

DATE: 26-0CT-88

TIME: 15:25 DFD E12 DATA FLOW DEFINITIONS

APJ PROJECT 966

PAGE 5 EXCELERATOR 1.8

Name	Label	Description
T & E Data	TEST & EVALUATION	TEST AND EVALUATION DATA
	DATA	FIELD INFORMATION; TYPE; STYLE: Narrative comments or extracts from T&E documents. PURPOSE OF DATA: This data is used to help assess maintenance task, concept, allocation validations. It can also be used to assess the status of open T&E actions including maintenance demonstrations or teardowns. SOURCE OF DATA: Test & evaluation, maintenance demonstration/teardown plans and results.

DATE: 26-OCT-88

APJ PROJECT 966 DFD E12 DATA STORES DEFINITION

PAGE 1 EXCELERATOR 1.8

TIME: 15:44

Напо	Label	Description
DES/F	DESIGN FILE	DESIGN FILE PURPOSE OF DATA STORE : This store contains design information which will aid in assessing S&I interfaces to include RSI. SOURCE OF DATA : Contract deliverables, design review minutes, drawings, specs, working group observations/comments.
FUND/F	FUNDS FILE	FUNDS FILE PURPOSE OF DATA STORE: This store contains funding resource information which is used to determine adequacy of funding for S&I efforts. SOURCE OF DATA: Funding related documents found in PM office.
ILSP/F	ILSP FILE	INTEGRATED LOGISTICS SUPPORT PLAN PURPOSE OF DATA STORE: This file is the plan where the overall logistics effort plan for a project is documented and reviewed by members of the ILSMT. Any changes or significant observation affecting the plan should be noted in there and also reviewed by ILSMT and program manager personnel as appropriate.
LSAR	LSAR FILE	LOGISTICS SUPPORT ANALYSIS RECORD FILE PURPOSE OF DATA STORE: This file or records holding area contains LSA Task reports or their equivalent; LSAR master record sheet information; LSAR reports when system is automated. It contains logistics data which can be used to assess various ILS elements. MIL-STD 1388-1A and 1388-2A should be looked at for complete outputs available.
NONFND/F	NONFUND RESOURCES FILE	PURPOSE OF DATA STORE: Identifies non monetary resources which are available (ie. personnel, standardization working committees, facilities, equipment, etc.) SOURCE OF INFORNATION: PM can provide information or assist functional managers on the project to identify these.
REQ/F	REQMITS DOCUMENT	REQUIREMENTS (DOCUMENTS) FILE ACRONYMS: JSOR - Joint Services Operational Requirements O60 - Operational and Organizational ROC - Required Operational Capabilities PURPOSE OF DATA STORE: This data store contains information on the stated RSI requirements which the system must or should meet. SOURCE OF DATA: Requirements documents (JSOR's, ROC's, multinational development agreements), O60 plans, Mission Profile documents, and systems or equipment specifications.
REV/F	REVIEW FILE	REVIEW FILE PURPOSE OF DATA STORE: This file contains information from program, design, and LSA reviews. It is used to provide information which will help to evaluate plans and resources execution efforts. It also contains information on contractual requirements SOURCE OF DATA: Documents/ minutes from program, design and LSA

contractor progress reports etc.

related reviews. Acquisition documents, RFF's, contracts,

DATE: 26-0CT-88

TIME: 15:44

APJ PROJECT 966 DFD E12 DATA STORES DEFINITION

PAGE EXCELERATOR 1.8

Label Description Name RSI/POL/F RSI POLICY & RATIONALIZATION, STANDARDIZATION, INTEROPERABILITY (RSI) POLICY FILE AND

> AGREEMENTS FILE AGREEMENTS FILE PURPOSE OF DATA STORE : This data store contains information on policies, directives, established agreements such as STANAG's,

QSTAG's, etc. to be utilized in the implementation of RSI. SOURCE OF DATA : AR's 32-1,32-2,32-3,32-4; MATO AAP 4, DA PAM 310-35,

AR 700-66

SEI ASSESSMENT STANDARDIZATION AND INTEROPERABILITY FILE SEI/F FILE

> PURPOSE FOR DATA STORE : This data store is used to store comments or assessments throughout the S&I review process for a later rollup of all comments.

> SOURCE OF DATA: The output information generated from the various S&I processes.

STDN/F STANDARDIZATION STANDARDIZATION FILE FILE

> PURPOSE OF DATA STORE : Contains information on policies involving standardisation issues as described in AR's 700-47, 700-50, 700-60; it also contains information on the Standardisation Plan which is a program management document per AR 70-1 .

SOURCE OF DATA: Policies from AR 700-47,700-50,700-60, MIL-SID's addresing uniform procedures (ie. drawings) and the standardisation

TEE TEST 4 , TEST & EVALUATION EVALUATION

> PURPOSE OF DATA STORE : This information is used to provide the reviewer with access to tests evaluation data to include maintenance demonstrations in order to validate assignments of maintenance tasks. In TASK E12 similar information is provided but it is used to check for the validation of Standardisation and Interoperability applications. SOURCE OF DATA : Any Til document such as TEMP's, IEP's, Detailed Test Plans, Test Reports, Evaluation Reports, Scoring Conference Results, TIMG's

DATE: 26-OCT-88

TDE: 15:49

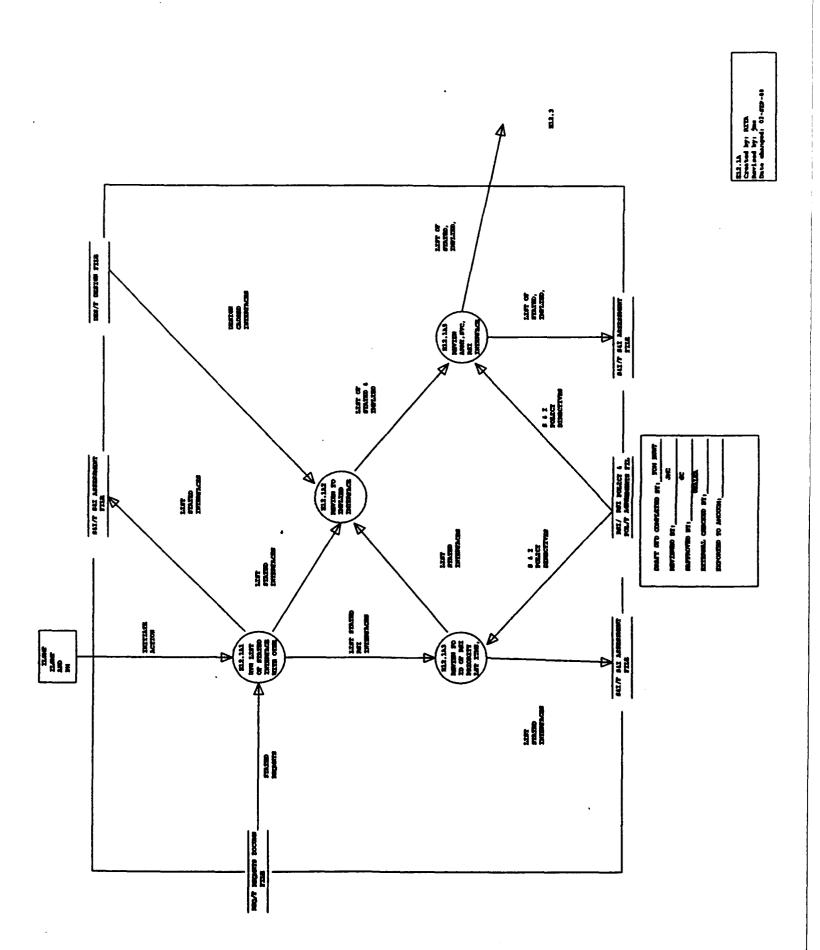
APJ PROJECT 966
DFD E12 EXTERNAL ENTITY DEFINITION

PAGE 1 EXCELERATOR 1.8

Name	Label	Description
ILSMI	ILSMT	THESE ARE THE ACTIVITIES WHICE WILL NORMALLY DIRECT THAT A MAINTENANCE
	AND	PLAN OR ANY OTHER ASPECT OF THE ILS PROGRAM BE REVIEWED. INFORMATION
	PM	GOES TO THEM FOR ACTION UNLESS THEY ARE CONDUCTING THE ASSESSMENT
		THEMSELVES.

E12.1A .

INTERFACES WITH OTHER ARMY, SERVICES AND ALLY EQUIPMENT



DATE: 26-00T-88

TIME: 15:20

APJ PROJECT 966

PAGE DFD 212.1A PROCESS DEFINITIONS EXCELERATOR 1.8

Label Description Name RVW LIST REVIEW LIST OF STATED INTERFACES WITH OTHER EQUIPMENT **E12.1A1** OF STATED INTERPACES PURPOSE OF DATA PROCESS : This process starts the review process by WITH OTHER identifying the explicitly stated interfaces given in the requirements EQUIPMENT documents (ie., " The XM will be able to exchange with the German Army's SOURCE OF DATA : Requirement documents. REVIEW FOR REVIEW FOR INPLIED INTERFACES E12.132 IMTERFACES PURPOSE OF DATA PROCESS: This process checks for any implied RSI interfaces (end item or major assemblies) which may have been assumed or unknown at the time the requirements documents were written. SOURCE OF IMPORMATION : Inputs from El2.1A1, El2.1A3 and the design file REVIEW FOR REVIEW FOR THE IDENTIFICATION OF RSI PRICRITY LIST ITEMS AND STANDARD E12.1A3 ID OF RSI AGREEMENTS PRIORITY LST ITMS, & PURPOSE OF DATA PROCESS: This process takes the development item's STAND.AG'S stated interfaces with allies equipment and checks against the RSI issues given in AR's 34-1, 34-2, and any standard agreements that may exist for this type item. This will help determine what standardisation actions are mandatory, desired or not mandatory. SOURCE OF DATA: Interfaces identified in requirements documents; policies set in Par. 2-1, AR 34-1; priorities list given in Par. 2-3, AR 34-2: STANAGS in NATO/CENTAG Allied Administrative Publications (AAP/CAAP-4); QSTAG's (see Quadripartite Standardization Agreement List); ASCC advisory publications; ABCA Navy Standards Agreements E12.1A5 REVIEW REVIEW ARMY, OTHER SERVICES, (ALLIED) RSI INTERPACES ARMY, SVC, PURPOSE OF DATA PROCESS: This process is a check on potential INTERFACES applications affecting the development or which could affect other developments which show potential for joint cooperation. This is more of an approach wherein one is looking at other activities products to see if something could be "borrowed or loaned" to enhance

opportunity.

interoperability but which may not have been stated, or implied --an

DATE: 26-OCT-88

TDE: 15:39

APJ PROJECT 966

DFD E12.1A DATA FLOW DEFINITIONS

PAGE 1 EXCELERATOR 1.8

Name	Label	Description

DES/INT DESIGN DESIGN CAUSED INTERFACES

CAUSED

INTERFACES FIELD INFORMATION, TYPE, STYLE: Narrative comments.

PURPOSE OF DATA: This information is aggregated from the design file to show what interfaces with S&I implications need to be considered which where neither stated nor initially implied, but because of design accompodations must now be considered for its S&I impacts.

SOURCE OF DATA: Design reviews or design working group notes.

INIT/ACT INITIATE

ACTION

LST/STA/INP/INT LIST OF LIST OF STATED AND INPLIED INTERFACES

STATED 6

IMPLIED FIELD INFORMATION, TYPE, STYLE : Narrrative comments.

INTERFACES

PURPOSE OF DATA: This data further aggregates information on implied

interfaces not explicitly stated in the requirements documents.

SOURCE OF DATA : E12.1A2 process.

LST/STA/ING/POT/INT LIST OF LIST OF STATED, INGLIED, POTENTIAL INTERFACES

STATED,

IMPLIED, FIELD INFORMATION, TYPE, STYLE : Narrative comments.

POTENTIAL

INTERFACES PURPOSE OF DATA : Data is aggregated to show listing of all actual and

potential interfaces having either RSI for E12.1 series processes or

, internal Army and DOD S&I interfaces.

SOURCE OF DATA : All E12.1A series subprocesses or E12.2 series

subprocesses

LST/STA/INT LIST LIST OF STATED INTERFACES

STATED

LITERFACES FIELD IMPORMATION, TYPE, STYLE : Marrative comments.

PURPOSE OF DATA : This data compiles S4I stated requirements

information so the requirements documents do not need to be referenced again for this information. It also may contain the reviewers interim

assessments associated with each stated interface.

SOURCE OF DATA: E12.1A1 and E12.1A3 process wherein requirements are

reviewed and identified.

S & I/POL/ DIRECTIVE S & I S&I POLICY DIRECTIVES

POLICY

DIRECTIVES FIELD INFORMATION, TYPS, STYLE : Narrative comments

PURPOSE OF DATA : This information contains the Standardisation and Interoperability policy and directives information which must be

complied with when evaluating S&I.

SOURCE OF DATA: AR 34 series, AR 71-9, 700-47, 700-50, 700-60, 700-72,

700-101, 700-115, 703-1, 750-43, AMC-R 700-83, DODD 3405.1,

DS PAM 310-35, MIL-STD 633, 680, 838, 965, and MIL MANDBOOK 113 apply to

standardisation concerns.

DATE: 26-0CT-88

APJ PROJECT 966

DFD E12.1A DATA FLOW DEFINITIONS

PAGE EXCELERATOR 1.8

TIME: 15:39

Label Description LIST STATED LIST STATED RSI REQUIREMENTS STA/RSI/REQ RST

INTERFACES FIELD INFORMATION, TYPE, STYLE : Narrative comments/listing

PURPOSE OF DATA: This is a segregated list of requirements showing only RSI or ally related type S&I requirements. It is used to further categorize the development as to where it fits in the RSI priority categories and to check for the applicability of any standing agreements.

SOURCE OF DATA : Requirements document as further refined in process E12.131

STATED REQUIREMENTS STAT/REQ STATED RECESTES

> FIELD INFORMATION, TYPE STYLE : Marrative comments or extracts from requirements documents.

PURPOSE OF DATA: This data identifies the explicitly stated Standardization & Interoperability requirements the system must meet for either RSI or internal DOD use (at the end item or below levels). SOURCE OF DATA : Requirements documents .

DATE: 26-00T-88

TDG: 15:45

APJ PROJECT 966

DFD E12.1A DATA STORES DEFINITION

PAGE

EXCELERATOR 1.8

Намо	Label	Description
DES/F	DESIGN FILE	DESIGN FILE
		PURPOSE OF DATA STORE : This store contains design information which will aid in assessing S&I interfaces to include R&I.
		SOURCE OF DATA : Contract deliverables, design review minutes,
		drawings, specs, working group observations/comments.
req/f	REGISTS DOCUMENT	REQUIREMENTS (DOCUMENTS) FILE
	FILE	ACRONYMS : JSOR - Joint Services Operational Requirements

060 - Operational and Organizational

ROC - Required Operational Capabilities

PURPOSE OF DATA STORE: This data store contains information on the stated RSI requirements which the system must or should meet. SOURCE OF DATA: Requirements documents (JSOR's, ROC's, multinational development agreements), O4O plans, Mission Profile documents, and systems or equipment specifications.

RSI POLICY & RATIONALIZATION, STANDARDIZATION, INTEROPERABILITY (RSI) POLICY FILE AND RSI/POL/F AGREEMENTS FILE AGREEMENTS FILE

> PURPOSE OF DATA STORE : This data store contains information on policies, directives, established agreements such as STANAG's, QSTAG's, etc. to be utilised in the implementation of RSI. SOURCE OF DATA : AR's 32-1,32-2,32-3,32-4; MATO AAP 4, DA PAM 310-35,

AR 700-66

S41 ASSESSMENT STANDARDITATION AND INTEROPERABILITY FILE SEI/T FILE

> PURPOSE FOR DATA STORE : This data store is used to store comments or assessments throughout the S6I review process for a later rollup of all

SOURCE OF DATA: The output information generated from the various \$41 processes.

DATE: 26-OCT-88
TIME: 15:50

APJ PROJECT 966

DFD E12.1A EXTERMAL ENTITY DEFINITION

PAGE

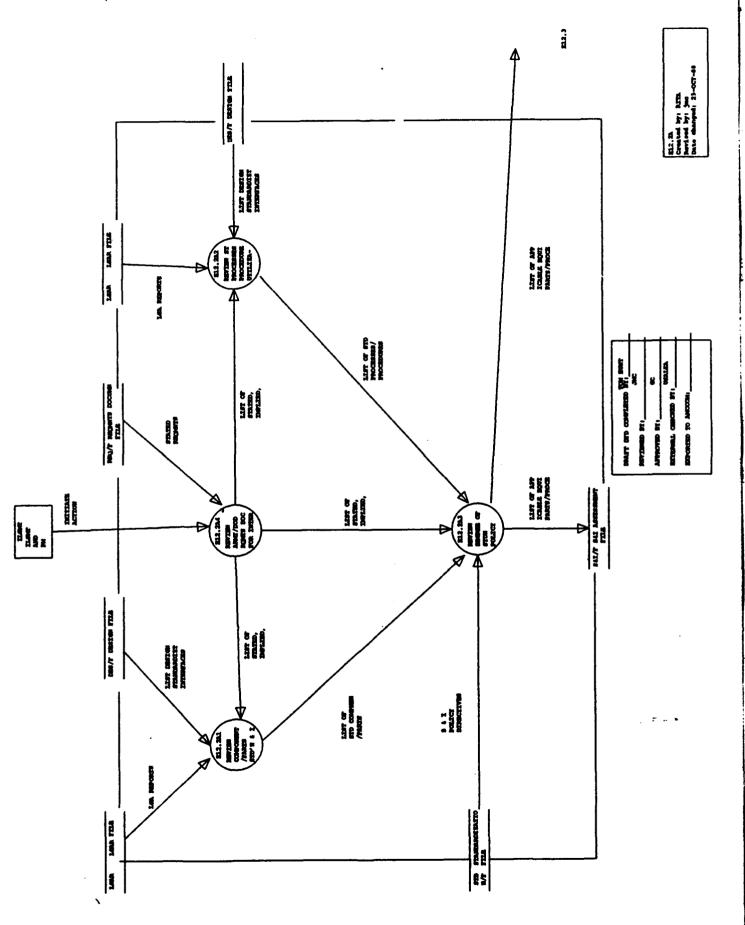
EXCELERATOR 1.8

Name
Label Description

ILSMT ILSMT THESE ARE THE ACTIVITIES WHICH WILL NORMALLY DIRECT THAT A MAINTENANCE
AND PLAN OR ANY OTHER ASPECT OF THE ILS PROGRAM BE REVIEWED. INFORMATION
PM GOES TO THEM FOR ACTION UNLESS THEY ARE CONDUCTING THE ASSESSMENT
THEMSELVES.

E12.2A .

PARTS, PROCESSES & SUPPLY STANDARDIZATION



DATE: 26-OCT-88 TIME: 15:21 APJ PROJECT 966

DFD E12.2A PROCESS DEFINITIONS

PAGE 1 EXCELERATOR 1.8

Name Label Description R12.231 REVIEW COMPONENTS/PARTS STANDARDIZATION AND INTERCHANGEABILITY REVIEW COMPONENTS PURPOSE OF DATA PROCESS : This process is used to review whether /PARTS STD'N & IN components/parts/assemblies have been checked or will be checked for TERCHNOBLY standardization or interchangeability. One is checking to see that new parts are kept to a minimum by utilizing items which exist already in the system. An assessment is made as to whether existing NSN, part numbered items, and MILSPEC items are being adequately used . SOURCE OF DATA: Results from proposed parts screens against the inventory. Extract design file information from drawings, specs, reviews or working group proceedings. E12.232 REVIEW STD REVIEW STANDARD PROCESSES/PROCEDURES UTILIZATION PROCESSES/ PROCEDURES PURPOSE OF DATA PROCESS : This process reviews for the utilization of UTILIZA- standard/uniform processes and procedures used in logistic support TION operations for operating/utilizing the equipment. SOURCE OF DATA : Design file inputs such as reviews, drawings, space, proceedings from working groups. E12.233 REVIEW DEGREE OF STANDARDIZATION POLICY APPLICATION REVIEW DEGREE OF STDN ACRONYMS: AR - Army Regulation POLICY AMC-R - Army Materiel Command Regulation APPLICATM PURPOSE OF DATA PROCESS: This process checks the degree to which standardization policies of AR's 34-2, 34-3, 34-4, 700-47, 700-50, 700-60, 700-72, 700-101, 700-115, 703-1, and AMC-R 700-83 are being applied in the design process SOURCE OF DATA: Standardisation file and inputs from E12.211, E12.2A2, AND E12.A3 E12.234 REVIEW REQUIREMENTS DOCUMENTS FOR SEI INTERFACES REVIEW ARMY/DOD

ROMIS DOCS PURPOSE OF DATA PROCESS: This process reviews the requirements
FOR INTERN documents for any stated, implied or potential standardisation or
AL INTERPS interoperability requirements within DOD. the requirements document
, for example, may state or allude to particular interoperability of
cetain equipment, parts or components.

SOURCE OF INFORMATION : The requirements documents

TIME: 15:40

APJ PROJECT 966 DFD E12.2A DATA FLOW DEFINITIONS

PAGE 1 EXCELERATOR 1.8

Label Description Name INITIATE INIT/ACT

LSA/REP

ACTION

LSA REPORTS LOGISTICS SUPPORT ANALYSIS (LSA) REPORTS OR RELATED DOCUMENTS FIELD INFORMATION, TYPE, STYLE : Narrative and numerical

> comments/extracts from LSAR numbered reports or LSA task performance reports

PURPOSE OF DATA: This data is used as input information on which to perform various processes.

SOURCE OF DATA: LSAR, LSA task reports not documented in LSAR. Specific report numbers under the LSAR must be selected by subject as required for the specific process. MIL-STD 1388-2A lists the various automated reports and the master data record sheets A-J available. Not all LSA task outputs are recorded on the LSAR; the LSA plan (TASK 201) for the particular system needs to be reviewed to see what tasks where to be done. Once LSA tasks are identified you may need to go to MIL-STD 1388-1A or contract for a review of what is required under the various tasks; this may provide an idea if results will also /not be found in hte LSAR.

LST/DES/INT

LIST DESIGN LIST DESIGN STANDARDIZATION INTERFACES

STANDARDIZTN

INTERFACES FIELD INFORMATION, TYPE, STYLE : Narrative comments.

PURPOSE OF DATA: This data contains a listing of components, processes where design standardization efforts are taking/will/could take place based on engineering studies.

SOURCE OF DATA: Information comes from design data derived from drawings, analyses, etc.

LST/PROC/SUP

LIST OF STD LIST OF STANDARD PROCESSES/PROCEDURES UTILIZED

PROCESSES/

PROCEDURES FIELD INFORMATION, TYPE, STYLE : Narrative comments and lists.

UTILIZATION

PURPOSE OF DATA: Data will be used to evaluate the usage of standard processes and procedures in the assembly and manufacture of the equipment. A comment on how the engineering community arrived at any unusual processes/procedures should be made.

SOURCE OF DATA : Design file which includes drawings, specs, working group notes/minutes etc.

TIME: 15:40

APJ PROJECT 966

DFD E12.2A DATA FLOW DEFINITIONS

PAGE

EXCELERATOR 1.8

Label

Description

LST/PRT/PRO/WITH/ASS LIST OF APPL LIST OF APPLICABLE EQUIPMENT, PARTS, PROCESSES/PROCEDURES

ICABLE EQUIP STANDARDIZATION WITH ASSESSMENTS

PARTS/PROCES (FOR NON-RSI DIRECTLY RELATED ITEMS)

STANDRDIZTN

WITE ASSMIS FIELD INFORMATION, TYPE, STYLE : Marrative comments and lists with

assessment comments.

PURPOSE OF DATA : This output data reflects the evaluation of the reviewer as to what parts and processes are undergoing standardisation efforts, as well as an assessment as to what greater extent it should be considered. RSI items may also form part of this list if the parts/processess are also common to allies; however, the intent is to check for standardization and interoperability within DOD systems. SOURCE OF DATA: The E12.2A3 process wherein lists are consolidated and

assessed.

LST/STA/IMP/POT/INT LIST OF

LIST OF STATED, IMPLIED, POTENTIAL INTERLACES

STATED.

IMPLIED.

FIELD INFORMATION, TYPE, STYLE : Narrative comments.

POTENTIAL

INTERFACES PURPOSE OF DATA: Data is aggregated to show listing of all actual and

potential interfaces having either RSI for E12.1 series processes or

internal Army and DOD S&I interfaces.

SOURCE OF DATA: All E12.1A series subprocesses or E12.2 series

subprocesses

LST/STD/COMP

LIST OF

LIST OF STANDARD COMPONENTS/PARTS

SID COMPNENT

/PARTS

FIELD INFORMATION, TYPE, STYLE: Marrative comments and listings. PURPOSE OF DATA: Data is used to determine if an adequate effort has been made to standardise parts, components, assemblies. Part of the data identifies what method the engineering community used to identify or screen for common/existing components, instead of creating new items. SOURCE OF DATA: The design file which includes drawings, specs, working group notes/minutes,etc.

S4I/POL/DIRECTIVES/S S 4 I

STANDARDIZATION AND INTEROPERABILITY POLICY DIRECTIVES AND

STANDARDIZATION PLAN DATA

DIRECTIVES

4 STDN PLAN FIELD INFORMATION, TYPE, STYLE : Marrative comments.

DATA

PURPOSE OF DATA: Provides information concerning S&I policies and data from the System Standardization Plan if one exists already. SOURCE OF INFORMATION: The System Standardisation Plan, policies from AR's 700-47, and 700-67

TIME: 15:40

APJ PROJECT 966

DFD E12.2A DATA FLOW DEFINITIONS

PAGE 3

EXCELERATOR 1.8

Label Name Description STATED STAT/REQ

REQMNTS

STATED REQUIREMENTS

FIELD INFORMATION, TYPE STYLE : Narrative comments or extracts from requirements documents.

PURPOSE OF DATA: This data identifies the explicitly stated Standardization & Interoperability requirements the system must meet for either RSI or internal DOD use (at the end item or below levels). SOURCE OF DATA : Requirements documents .

TIME: 15:46

APJ PROJECT 966 DFD E12.2A DATA STORES DEFINITION

PAGE 1 EXCELERATOR 1.8

DES/F

DESIGN FILE DESIGN FILE

PURPOSE OF DATA STORE : This store contains design information which

will aid in assessing S&I interfaces to include RSI.

SOURCE OF DATA : Contract deliverables, design review minutes,

drawings, specs, working group observations/comments.

LSAR

LSAR FILE LOGISTICS SUPPORT AMALYSIS RECORD FILE

PURPOSE OF DATA STORE: This file or records holding area contains LSA Task reports or their equivalent; LSAR master record sheet information; LSAR reports when system is automated. It contains logistics data which can be used to assess various ILS elements. MIL-STD 1388-1A and 1388-2A

should be looked at for complete outputs available.

REQ/F

REQUESTS DOCUMENT REQUIREMENTS (DOCUMENTS) FILE

FILE

ACRONINS : JSOR - Joint Services Operational Requirements

OSO - Operational and Organizational

ROC - Required Operational Capabilities

PURPOSE OF DATA STORE: This data store contains information on the stated RSI requirements which the evstem must or should meet.

SOURCE OF DATA: Requirements documents (JSOR's, ROC's, multinational development agreements), O6O plans, Mission Profile documents, and

systems or equipment specifications.

SGI/F

SEI ASSESSMENT STANDARDIZATION AND INTEROPERABILITY FILE

FILE

PURPOSE FOR DATA STORE: This data store is used to store comments or assessments throughout the S&I review process for a later rollup of all

SOURCE OF DATA: The output information generated from the various S&I processes.

STDM/F

STANDARDIZATION STANDARDIZATION FILE

FILE

PURPOSE OF DATA STORE: Contains information on policies involving standardization issues as described in AR's 700-47, 700-50, 700-60; it also contains information on the Standardization Plan which is a program management document per AR 70-1.

SOURCE OF DATA: Policies from AR 700-47,700-50,700-60, MIL-SID's addresing uniform procedures (ie. drawings) and the standardisation Plan

TIME: 15:51

APJ PROJECT 966

DFD E12.2A EXTERNAL ENTITY DEFINITION

PAGE

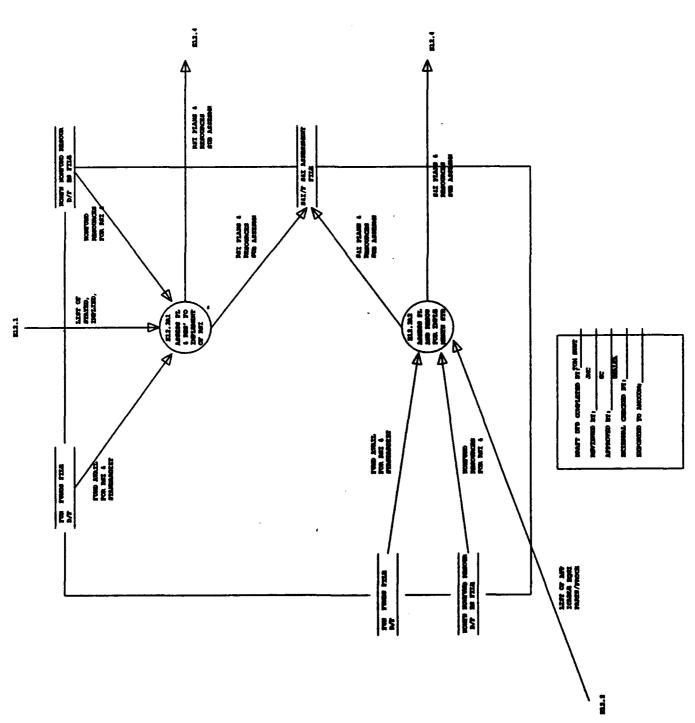
EXCELERATOR 1.8

Name	Label	Description
ILSMT	ILSMI	THESE ARE THE ACTIVITIES WHICH WILL HORMALLY DIRECT THAT A MAINTENANCE
	AND	PLAN OR ANY OTHER ASPECT OF THE ILS PROGRAM BE REVIEWED. INFORMATION
	PM	GOES TO THEM FOR ACTION UNLESS THEY ARE CONDUCTING THE ASSESSMENT
		THEMSELVES.

E12.3A

STANDARDIZATION & INTEROPERABILITY IMPLEMENTATION PLANS & RESOURCES AVAILABILITY

ELL.M. Created by: RID. Darkood by: 3m ibno daspad: 20-138-01



TDE: 15:22

APJ PROJECT 966

DFD E12.3A PROCESS DEFINITIONS

PAGE

EXCELERATOR 1.8

Label Description Name ASSESS PLM ASSESS PLANNING AND RESOURCES FOR IMPLEMENTATION OF RSI INTERFACE LIST E12.3A1 6 RES' FOR ITEMS Delthenin PURPOSE OF DATA PROCESS: This process compares the identified and OF REI potential RSI opportunities against the monetary and non-monetary resources available or programmed to implement RSI. This process will produce assessments as to the adequacy of the resources allocated to accomplish an acceptable or higher level of RSI. SOURCE OF IMPORMATION : Resource availability files and lists of RSI interfaces from process 212.1 and 212.2 ASSESS PLN ASSESS PLANNING AND RESOURCES FOR IMPLEMENTATION OF STANDARDIZATION E12.3A2 AND RESOUR EFFORTS ON PROJECT WITHIN THE ARMY AND DOD TOR THEFT. MENTH STDN PURPOSE OF DATA PROCESS: To assess non-RSI standardization and IM DOD interoperability interfaces for adequacy of financial and non-financial resources to accomplish the standardisation effort. Specifically, standardisation efforts within other Army activities and

SOURCE OF DATA : Output process from E12.3A2.

other services is assessed.

DATE: 26-007-88

TIME: 15:41

APJ PROJECT 966

DFD E12.3A DATA FLOW DEFINITIONS

PAGE

EXCELERATOR 1.8

Mama

Labe

Description

FUND/RSI/STDM

FUND AVAIL

FUNDS AVAILABLE FOR RSI AND STANDARDIZATION EFFORTS

FOR RSI &

STANDARDIZTW ACRONYMS: RSI - Rationalization, Standardization & Interoperability

S&I - Standardisation & Interoperability

048 - Operations and Support

PM - Program Manager

FIELD INFORMATION, TYPE, STYLE : Marrative and numerical comments PURPOSE OF DATA : This data will be used by the reviewer to help assess the adequacy of funding resources made available in the contract for the implementation of RSI and standardization efforts. It can also be used to identify if the various participants are carrying their "fair" share of the burden caused by the S&I effort, especially if it adds significant costs to the development or O48 costs. SOURCE OF DATA: Funding profiles available from the PM or his budget representatives.

LST/PRT/PRO/WITH/ASS LIST OF APPL LIST OF APPLICABLE EQUIPMENT, PARTS, PROCESSES/PROCEDURES

ICABLE EQUIP STANDARDIZATION WITH ASSESSMENTS

PARTS/PROCES (FOR NON-RSI DIRECTLY RELATED ITEMS)

STANDRDIZTM

WITH ASSMITS FIELD IMPORMATION, TYPE, STYLE: Marrative comments and lists with assessment comments.

> PURPOSE OF DATA : This output data reflects the evaluation of the reviewer as to what parts and processes are undergoing standardisation efforts, as well as an assessment as to what greater extent it should be considered. RSI items may also form part of this list if the , parts/processess are also common to allies; however, the intent is to check for standardisation and interoperability within DOD systems. SOURCE OF DATA: The E12.2A3 process wherein lists are consolidated and assessed.

LST/STA/IMP/POT/INT LIST OF

STATED.

LIST OF STATED, IMPLIED, POTENTIAL INTERPACES

IMPLIED.

FIELD INFORMATION, TYPE, STYLE : Marrative comments.

POTENTIAL

INTERFACES PURPOSE OF DATA: Data is aggregated to show listing of all actual and potential interfaces having either RSI for E12.1 series processes or internal army and DOD S&I interfaces.

> SOURCE OF DATA : All E12.1A series subprocesses or E12.2 series subprocesses

NONFHD/RSI/STDM/RES NOMFUND

MONFOND RSI AND STANDARDIZATION RESOURCES

RESOURCES

TOR RET 4

FIELD INFORMATION, TYPE, STYLE : Marrative and numerical comments or STANDARDIZTM document extracts.

> PURPOSE OF DATA : This data is used to evaluate any non-mometary resources available to the project such as facilities, personnel equipment that will assist in executing the standardisation effort. SOURCE OF DATA : MOU's, agreement documents with allies or other services identifying resource responsibilities to the project.

PAGE DATE: 26-0CT-88 APJ PROJECT 966

EXCELERATOR 1.8 DFD E12.3A DATA FLOW DEFINITIONS TDG: 15:41

Label Description Hame ______ RSI PLANS & RSI PLANS AND RESOURCES (ALLOCATION) SUBASSESSMENT RSI/SUB/ASS RESOURCES SUB ASSESSMIT FIELD INFORMATION, TYPE, STYLE: Marrative comments. PURPOSE OF DATA : This output data provides the reviewer's assessment as to how adequate are the financial and non-financial resources to accomplish the RSI effort. SOURCE OF INFORMATION : Output information from E12.3A1 SEI PLANS & STANDARDIZATION AND INTEROPERABILITY PLANS AND RESOURCES SUBASSESSMENT SEI/SUB/ASS RESOURCES (FOR WON-RSI EXCLUSIVE ITEMS) FOR THE PROJECT SUB ASSESSMET FIELD INFORMATION, TYPE, STYLE : Narrative comments PURPOSE OF DATA: This data contains the output information which identifies the adequacy of financial and non-financial resources to accomplish this aspect of the standardisation effort.

SOURCE OF DATA: This is output data from E12.3A2.

A-29

. .-

TIME: 15:47

APJ PROJECT 966

DFD E12.3A DATA STORES DEFINITION

PAGE

EXCELERATOR 1.8

1

Label

Description

FUND/F

FUNDS FILE

FUNDS FILE

PURPOSE OF DATA STORE : This store contains funding resource information which is used to determine adequacy of funding for SEI

SOURCE OF DATA: Funding related documents found in PM office.

NONFND/F

NONFUND RESOURC NON YUND RESOURCES FILE

ES FILE

PURPOSE OF DATA STORE : Identifies non monetary resources which are available (ie. personnel, standardization working committees,

facilities, equipment, etc.)

SOURCE OF INFORMATION: PM can provide information or assist functional

managers on the project to identify these.

SGI/F

SAI ASSESSMENT STANDARDIZATION AND INTEROPERABILITY FILE

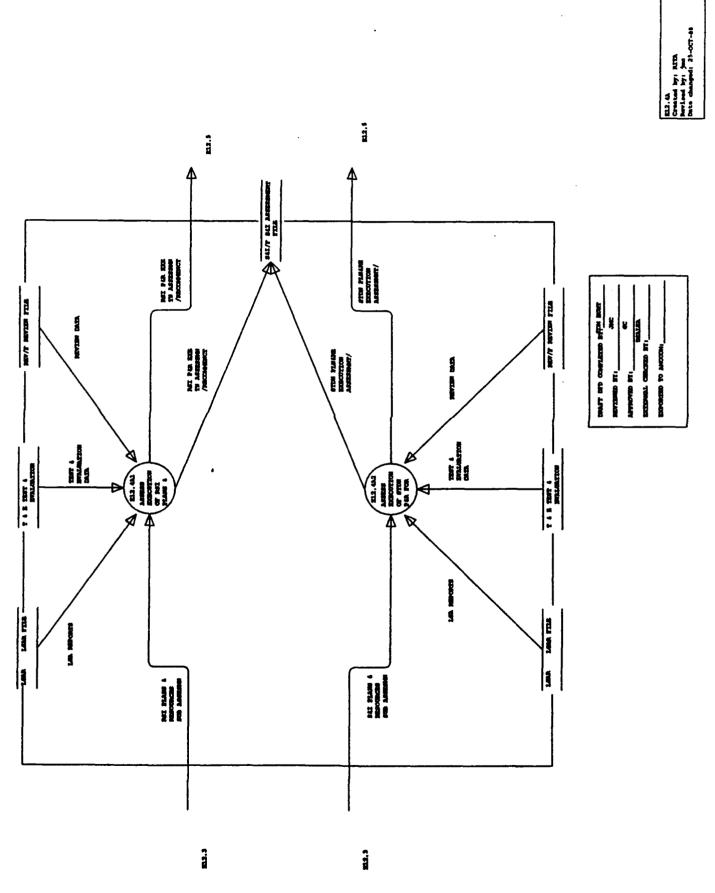
FILE

PURPOSE FOR DATA STORE : This data store is used to store comments or assessments throughout the S4I review process for a later rollup of all comments.

SOURCE OF DATA: The output information generated from the various S&I processes.

E12.4A

STANDARDIZATION & INTEROPERABILITY PLANS AND RESOURCES EXECUTION



A-31

TIME: 15:23

APJ PROJECT 966

DFD E12.4A PROCESS DEFINITIONS

PAGE 1 EXCELERATOR 1.8

Name		Description
E12.4A1	ASSESS EXECUTION	ASSESS EXECUTION OF RSI PLANS AND RESOURCES
	OF RSI	PURPOSE OF DATA PROCESS : This process takes prior accepted plans and
	PLANS &	resource allocations to accomplish RSI objectives and assesses how well
	RESOURCES	they were carried out. This is essentially a check on how well actions were carried out.
		SOURCE OF DATA: Program and design execution documents and
		planning/resource information allocated for RSI effort.
E12.4A2	Assess	ASSESS EXECUTION OF PLANS AND RESOURCES FOR MON-RSI RELATED
	EXECUTION	STANDARDIZATION EFFORTS
	OF STDN	
	PER FOR	PURPOSE OF DATA PROCESS: This process takes the plans and resources
	NONRSI ITM	allocated to perform the standardization effort and checks to see how
		well it has been executed.
		SOURCE OF DATA: Planning and resource inputs from E12.3A1 and
		execution data from various files such as the LSAR, T & E, and review
		files.

DATE: 26-007-88

TIME: 15:42

APJ PROJECT 966 DFD E12.4A DATA FLOW DEFINITIONS

PAGE EXCELERATOR 1.8

Label

Description

LSA/REP

LSA REPORTS LOGISTICS SUPPORT ANALYSIS (LSA) REPORTS OR RELATED DOCUMENTS

FIELD INFORMATION, TYPE, STYLE : Narrative and numerical

comments/extracts from LSAR numbered reports or LSA task performance

reports

PURPOSE OF DATA: This data is used as input information on which to

perform various processes.

SOURCE OF DATA : LSAR, LSA task reports not documented in LSAR.

Specific report numbers under the LSAR must be selected by subject as required for the specific process. MIL-STD 1388-2A lists the various automated reports and the master data record sheets A-J available. Mot all LSA task outputs are recorded on the LSAR; the LSA plan (TASK 201) for the particular system needs to be reviewed to see what tasks where to be done. Once LSA tasks are identified you may need to go to MIL-STD 1388-1A or contract for a review of what is required under the various tasks; this may provide an idea if results will also /not be found in

hte LSAR.

REV/DTA

REVIEW DATA REVIEW DATA

FIELD INFORMATION, TYPE, STYLE: Narrative comments or extracts from

review documents.

PURPOSE OF DATA : Provides inputs so that RSI plan and resource

execution can be evaluated .

SOURCE OF DATA: Review documents found in the Review File .

RSI/EXEC

RSI PAR EXEC RSI PLANS AND RESOURCES EXECUTION ASSESSMENT AND RECOMMENDATIONS

/RECOMMENÇTM FIELD INFORMATION, TYPE, STYLE : Narrative comments

PURPOSE OF DATA : This data records the reviewers assessment as to how well plans and resources in support of the RSI effort have been

executed.

SOURCE OF DATA: This is an output from process E12.4A1

RSI/SUB/ASS

RSI PLANS & RSI PLANS AND RESOURCES (ALLOCATION) SUBASSESSMENT

RESOURCES

SUB ASSESMNT FIELD INFORMATION. TYPE, STYLE: Narrative comments.

PURPOSE OF DATA: This output data provides the reviewer's assessment as to how adequate are the financial and non-financial resources to

accomplish the RSI effort.

SOURCE OF IMPORMATION : Output information from E12.3A1

841/8UB/ASS

S4I PLANS 4 STANDARDIZATION AND INTEROPERABILITY PLANS AND RESOURCES SUBASSESSMENT

RESOURCES (FOR MON-RSI EXCLUSIVE ITEMS) FOR THE PROJECT

SUB ASSESSMET

FIELD INFORMATION, TYPE, STYLE : Narrative comments

PURPOSE OF DATA: This data contains the output information which identifies the adequacy of financial and non-financial resources to

accomplish this aspect of the standardization effort.

SOURCE OF DATA : This is output data from E12.3A2 .

TIME: 15:42

APJ PROJECT 966

DFD E12.4A DATA FLOW DEFINITIONS

PAGE

EXCELERATOR 1.8

2

Name

Label

Description

SIDN/EXEC

SIDN PLNERES STANDARDIZATION PLANS & RESOURCES EXECUTION ASSESSMENT/RECOMMENDATIONS

EXECUTION

ASSESSMNT/

RECOMMENDATH FIELD INFORMATION, TYPE, STYLE : Narrative comments

PURPOSE OF DATA: Provides the reviewers assessments and

recommendations as to how well the plans and resources allocated to the

SEI effort have been executed.

SOURCE OF DATA: This is output data from the E12.4A2 process

T & E Data

TEST 4

TEST AND EVALUATION DATA

EVALUATION

DATA

FIRLD INFORMATION; TYPE; STYLE : Narrative comments or extracts from T&E documents.

PURPOSE OF DATA: This data is used to help assess maintenance task, concept, allocation validations. It can also be used to assess the status of open T&E actions including maintenance demonstrations or teardowns.

SOURCE OF DATA: Test & evaluation, maintenance demonstration/teardown plans and results.

TIME: 15:48

APJ PROJECT 966

DFD E12.4A DATA STORES DEFINITION

PAGE EXCELERATOR 1.8

Name

Label

Description

LSAR

LSAR FILE

LOGISTICS SUPPORT ANALYSIS RECORD FILE

PURPOSE OF DATA STORE: This file or records holding area contains LSA Task reports or their equivalent; LSAR master record sheet information; LSAR reports when system is automated. It contains logistics data which can be used to assess various ILS elements. MIL-STD 1388-1A and 1388-2A

should be looked at for complete outputs available.

REV/F

REVIEW FILE

REVIEW FILE

PURPOSE OF DATA STORE : This file contains information from program, design, and LSA reviews. It is used to provide information which will help to evaluate plans and resources execution efforts. It also contains information on contractual requirements SOURCE OF DATA: Documents/ minutes from program, design and LSA

related reviews. Acquisition documents, RFP's, contracts ,

contractor progress reports etc.

SEI/F

SEI ASSESSMENT STANDARDIZATION AND INTEROPERABILITY FILE

FILE

PURPOSE FOR DATA STORE : This data store is used to store comments or assessments throughout the S&I review process for a later rollup of all comments.

SOURCE OF DATA: The output information generated from the various S&I

processes.

TEB

TRRT £ EVALUATION TEST & EVALUATION

. PURPOSE OF DATA STORE : This information is used to provide the reviewer with access to tests evaluation data to include maintenance demonstrations in order to validate assignments of maintenance tasks. In TASK E12 similar information is provided but it is used to check for the validation of Standardization and Interoperability applications. SOURCE OF DATA : Any TGE document such as TERP's, IEP's, Detailed Test Plans, Test Reports, Evaluation Reports, Scoring Conference Results, TIWG' .

GLOSSARIES

GLOSSARY - DATA FLOW DIAGRAM

ABBREVIATION DESCRIPTION

DES/INT Design caused Interfaces

FUND/RSI/STDN Fund Avail for RSI &

Standardization

INIT/ACT Initiate Action

LSA/REP LSA Reports

LST/DES/INT List of STD Processes/

Procedures Utilization

LST/PRT/PRO/W/ASS List of Applicable Equip

Parts/Process Standardiztn

with Assessments

LST/STA/IMP/INT List of Stated & Implied

Interfaces

LST/STA/IMP/INT List of Stated, Implied,

Potential Interfaces

LST/STA/INT List Stated Interfaces

LST/STD/COMP List of STD Component/Parts

NONFND/RSI/STDN/RES Nonfund Resources for RSI &

Standardization

REV/DTA Review Data

RSI/EXEC RSI P&R EXEC TN Assessment/

Recommendation

S&I/POL/DIRCTV S&I Policy Directives

S&I/OVRAL/ASS S&I Overall Assessments

S&I/OVRAL/ASS/W/ACT S&I Assessment & Action Items

S&I/POL/DIRCTV/STDN S&I Policy Directives & STDN

Plan Data

S&I/SUB/ASS S&I Plans & Resources Sub

Assessment

STA/RSI/REQ List Stated RSI Interfaces

GLOSSARY - DFD (cont'd)

STAT/REQ Stated Requirements

STDN/EXEC STDN Pln & RES Execution
Assessment/Recommendation

STDN/INTEROP/ASSMNTS Standardization and Interoper-

ability Assessments

T & E DATA Test & Evaluation Data

GLOSSARY - TEXT

ABBREVIATION DESCRIPTION

ABCA American, British, Canadian,

Australier

AMSDL Acquisition Manpower Systems

and Data Requirements

Control List

APJ American Power Jet Company

AR Army Regulation

ASCC Air Standardization Coordin-

ating Committee

CENTAG Central Treaty Agreements

DA-PAM Department of the Army

Pamphlet

DFD Data Flow Diagrams

DOD Department of Defense

ILS 'Integrated Logistics Support

ILSMT Integrated Logistics Support

Management Team

JSOR Joint Services Operational

Requirements

LSA Logistic Support Analysis

LSAR Logistic Support Analysis

Record

MIL-SPEC Military Specification

MIL-STD Military Standard

MOU Memorandum of Understanding

MSP Maintenance Support Plan

NATO North Atlantic Treaty

Organization

Organizations and Operations 040 Operations and Support O&S PM Program Manager Quadripartite Standardiza-**QSTAG** tion Agreement Request for Proposal RIP ROC Required Operational Capability Rationalization, Standardiza-RSI tion and Interoperability RVW Review **STDAG** Standardization Agreement STDI Standardization Interoperability T&E Test and Evaluation Test Evaluation Management TEMP Plan

TIWG

Technology Integration

Working Group